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July 19, 1993

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BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	
Preparation for International Telecommunication Union World Radiocommunication Conferences	**ET Docket No. 93-198**

COMMENTS OF AFRISPACE CORPORATION

AfriSpace Corporation ("AfriSpace"), by its attorneys, hereby provides its comments on the above-captioned Notice of Inquiry (NOI) issued by the Federal Communications Commission ("FCC" or "Commission") on June 28, 1993.

Summary

AfriSpace strongly recommends that the U.S. Government take the position at WRC-93 that there should be no change in the provisions dealing with broadcasting satellite service (sound) ("BSS(Sound)") systems. The 1452-1492 MHz band should continue to be allocated to BSS(Sound) systems for the stated regions. Moreover, the restriction on BSS(Sound) systems pending an intervening planning conference to the upper 25 MHz is reasonable and not onerous on emerging players. It should be maintained pending a planning conference. That planning conference should not be held before 1997 in order to allow experience to develop,

on an experimental basis. Then, an appropriate and considered international regulatory response will be possible. Finally, AfriSpace discourages the Commission from advocating a single worldwide BSS(Sound) allocation. Such exercises tend to be futile and ineffective.

I. Background

A. The AfriSpace System

BSS(Sound) represents the most significant advance in radio in 75 years, delivering high fidelity radio programming to continent-size coverage areas, for much lower cost than existing terrestrial systems. AfriSpace is the leading developer of international BSS(Sound) systems, having invested over three million dollars in research and development, as well as developed strategic partnerships and/or teaming agreements.

(1) AfriSpace will improve distribution and reception of radio programming throughout Africa and the Middle East: Radio is the primary communications medium in large parts of the world, particularly in large land-mass areas such as Africa and the Middle East. The African-Arabian region, highly dependent on radio as its major source of information, is currently served by broadcasters primarily using medium- and short-wave radio technology. In the limited areas which receive shortwave,

listeners are dissatisfied with its poor aural quality.[1] Whenever FM services are available, listeners express dissatisfaction over its geographic limitations. Moreover, the expenses associated with implementing terrestrial broadcast facilities have discouraged such investment, thereby resulting in limited options within the region generally.

(2) AfriSpace will provide extremely broad and diverse programming. AfriSpace has also solved the problems of a limited choice of available programming. Each of AfriSpace's two satellites will deliver 54 channels of high quality digital radio to the 820 million people in the African-Arabian region. These channels are to include: music, sports, news and women's channels; a World Health Organization Channel, education channels such a University of the Air; as well as Voice of Nigeria, Voice of America, BBC and Radio Nederland. (See Attachment A, Projected Programming). By virtue of the AfriSpace system, the peoples of the African-Arabian region, for the first time, will have access to the kind of information we, in the developed world, have taken for granted for decades.

(3) AfriSpace has developed the first low-cost, efficient radio receiver. AfriSpace has also developed a new

generation of low-cost satellite radios, called "StarMan™", which are required in order to receive the AfriSpace signal. AfriSpace has teamed with Motorola to develop, manufacture and distribute the StarMan™ in the African-Arabian region through U.S. Government contracts. As a result, AfriSpace has solved the practical problem of many programmers seeking access to developing country markets: how to reach listeners efficiently and at affordable prices.

Moreover, millions of StarMan™ radios are to be manufactured in the U.S. and sold overseas during the late 1990s[2], representing thousands of new jobs in the U.S. AfriSpace presents the U.S. with an unparalleled opportunity to advance U.S. interests in furthering global democracy, access to health information, and world economic development, as well as expanding its labor force and business base.

B. Regulatory Status

AfriSpace has been issued an experimental license from the Federal Communications Commission to construct, launch and operate its AfriStar satellite on an experimental, non-interference basis. Further, it has been issued a conditional export license to export the AfriStar satellite to China for launch aboard a Long March

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2 Manufacturing studies have confirmed the feasibility of AfriSpace StarMan$_{TM}$ radios being sold for under $100, which makes them cost-competitive with 2 million of the 10 million new radios sold in Africa each year.

launch vehicle. The AfriSpace BSS(Sound) system has been Advanced Published through the ITU and is proceeding to coordination. Launch is scheduled 1996.[3]

II. Discussion

A. AfriSpace has Direct Experience with International Frequency Allocation

AfriSpace played a key role in securing the global agreement to allocate scarce radio frequencies to international BSS(Sound) services. Noah Samara, President and Chief Executive Officer of AfriSpace, was an active participant in the deliberations at the World Administrative Radio Conference in 1992 ("WARC'92"). It was at WARC '92 that the international community recognized the importance of international BSS(Sound) systems, and the direct contribution they can make to improving the condition of millions of people.

As a result, the WARC '92 allocated three bands (i.e., 1452-1492 MHz, 2310-2360 MHz, and 2535-1655 MHz) to this service. As the Commission noted in the NOI, the majority of countries are allocated the 1452-1492 MHz band. The United States and India have reserved the 2310-2360 MHz band for BSS(Sound) systems serving their regions. The WARC '92 acknowledged the need for further refinement of the parameters for BSS(Sound) systems by

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[3] Advance Publication of AfriStar has been submitted to the Radiocommunication Sector of the ITU, notification has been issued, and coordination is expected shortly.

instructing that a conference be convened, preferably prior to 1998, to address such issue. Further, it restricted operation of BSS(Sound) systems, until the conference is held, to the upper 25 MHz of each allocated band. AfriSpace will operate in the upper 25 MHz of the 1452-1492 MHz band which was allocated to BSS(Sound) systems for the African-Arabian region, or 1467-1492 MHz.

B. There is No Urgent Need to Convene A Planning Conference

As reflected in the Commission's NOI and the brevity of issues regarding BSS(Sound) outlined there, there does not appear to be a burning need to convene a world planning conference for BSS(Sound). Past experience has shown that premature international planning conferences impede technology development and system implementation. This is precisely what occurred for the BSS(TV) service at Ku-band. Rather, after several years of experience with AfriSpace and other experimental BSS(Sound) systems, it would be reasonable and appropriate to convene a planning conference then. At that time, the Commission, as well as other administrations, should have a base of experience on which to fashion appropriate parameters of operation. AfriSpace has not identified a reason to request that a WRC focus on BSS(Sound) issues any earlier than 1997. Indeed, a later (1999) WRC might even be more appropriate because greater experience would have accrued by that time.

C. BSS(Sound) Should Be Restricted to the Upper 25 MHz Until a Conference is Held.

WARC-92 decided that BSS(Sound) operations should be restricted to the upper 25 MHz of each band until a planning conference can be held. As noted above, AfriSpace advocates holding such a planning conference only in 1997 or later. In the interim, this bandwidth restriction does not appear problematic for early operations. AfriSpace intends to operate in the upper portion of 1452-1492 MHz band when it introduces its services to the African-Arabian region on an experimental basis in 1996.

D. A Single Worldwide Allocation is Impractical and Inadvisable

AfriSpace does not believe that effort should be expended attempting to obtain a single worldwide BSS(Sound) allocation. Such an exercise could be futile, and even if successful, such an allocation, at L-band or S-band, would likely not have sufficient bandwidth to accommodate all of the anticipated broadcaster demand. Alternatively, AfriSpace believes it is better to work to remove sharing restrictions on BSS(Sound) both at L-band and S-band and to work towards opening both bands for global BSS(Sound) allocations. This is consistent with the current multi-band (10 separate allocations) nature of shortwave radio service, which has impeded neither the marketability nor popularity of that service.

III. Summary

The U.S. Government should take the position at WRC-93 that there should be no change in the provisions dealing with BSS(Sound) systems. Specifically, the 1452-1492 MHz band should continue to be allocated to BSS(Sound) systems for the stated regions. Additionally, the current provisions restricting such systems to the upper 25 MHz should be maintained pending a planning conference. The date of that planning conference should be deferred for consideration until WRC-97, or later, by which time there should be sufficient experience with experimental BSS(Sound) systems upon which to fashion an appropriate international regulatory regime. Finally, the U.S. should not support the pursuit of a single worldwide BSS(Sound) allocation. Such exercises tend to be futile, ineffective, and would guarantee significant delays in bringing the service to market.

Respectfully Submitted,

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July 19, 1993

PROJECTED PROGRAMMING Attachment A

CHANNEL PLAN FOR MOTOROLA-PRODUCED STARMAN™ SATELLITE RADIOS

The Western Channel	The Eastern Channel	The Southern Channel	Format Description
1. World Beat Music	1. World Beat Music	1. World Beat Music	Afri-Caribbean Music
2. All-Sports (ESPN)	2. All-Sports (ESPN)	2. All-Sports (ESPN)	Round-the-Clock Sports Events
3. Radio Nigeria	3. KiSwahili	3. Voice of Botswana	National Broadcast Services
4. Voice of Cote d'Ivoire	4. Egypt Today	4. Voice of Namibia	National Broadcast Services
5. Africa No. 1	5. Voice of Ethiopia	5. Africa Today (SADC)	National Broadcast Services
6. Radio France	6. Radio France	6. Radio France	Service for French Expatriates
7. Euro-Rock	7. Euro-Rock	7. Euro-Rock	Contemporary European Music
8. Black Entertainment	8. Black Entertainment	8. Black Entertainment	Rap, Jazz, R&B Music
9. You & Your Health	9. You & Your Health	9. You & Your Health	Health Advisories & Information
10. Radio College	10. Radio College	10. Radio College	University via Radio
11. Radio Islam	11. Radio Islam	11. Radio Islam	Religious Programming
12. Christian Radio	12. Christian Radio	12. Christian Radio	Religious Programming
13. Voice of Senegal	13. Voice of Saudia	13. MNET	National Broadcast Services
14. Americana (VOA/NPR)	14. Americana	14. Aericana	Programming from the U.S.A.
15. Radio Nederland	15. Radio Nederland	15. Radio Nederland	Service for Dutch Expatriates
16. The African Woman	16. The African Woman	16. The African Woman	Service for the African Woman
17. BBC World Service	17. BBC World Service	17. BBC World Service	Global News Coverage
18. The Green Channel	18. The Green Channel	18. The Green Channel	Environmental & Development Information